Getting the whole Mono Lake Committee staff all together in one spot at the same time is more difficult than one might think. It takes a pretty special event, and some advance planning to make it happen—and it did, this year, for the first time I can remember in a long while.

It happened down at Mono Lake itself, County Park to be specific. It was a beautiful warm day, and after coaxing some staffers away from their work, we, all together, walked down the boardwalk, through the tufa, to the viewing platform overlooking the lake (see photo page 26). There’s nothing like a walk down to the lake to shed worries about deadlines, issues, and to-do lists, and by the time we got to the end everyone was smiling, relaxed, and happy. As we stood there, looking out at the rapidly-rising shoreline and listening to the birds and the quiet Geoff asked us to share our memories of our very first visit to this spot. Smiles turned to grins as people reached back in their memories—some back 16 years, some just last year—and we went around the circle telling our stories. Some folks remembered walking clear around the big tufa mound 150 yards out in the lake, some remembered pulling up the old boardwalk, and some remembered exactly where the lake level was at this time last year—all were excited to share their piece of history with this place.

This connection with Mono Lake is the thread that ties the Mono Lake Committee staff together, and to the 15,000 members we serve. This connection is why people come back year after year, making their own personal pilgrimages. It’s why we keep the Information Center & Bookstore open year-round. It’s why we produce the Mono Lake Newsletter. It’s why we lead countless education programs. It’s why we put in long hours, attend numerous meetings, and go the extra mile to make things right. It’s why we dream about Mono Lake’s challenges at night and wake up with new ideas in the morning. In short, it’s why we’re here.

Summer is a great time for connecting with Mono Lake—if it’s your first time here, or your 100th. Come, see the glassy water, listen to the gulls as they circle overhead, smell the sagebrush, walk, paddle, float, sit, enjoy, experience, connect. There are memories to revisit and new memories waiting to be made here. May this Newsletter serve to jog those memories and inspire new ones.

—Arya Degenhardt, Communications Director

County Park and the Mono Lake Tufa State Reserve boardwalk are great places to visit.

Mono Lake Committee Mission

The Mono Lake Committee is a non-profit citizens’ group dedicated to protecting and restoring the Mono Basin ecosystem, educating the public about Mono Lake and the impacts on the environment of excessive water use, and promoting cooperative solutions that protect Mono Lake and meet real water needs without transferring environmental problems to other areas.
Big water year for Mono Lake!

by Greg Reis

With snowpack as much as 180% of average at the highest elevations, there will be a lot of water filling Mono Lake this year!

This summer Mono Lake could reach its highest point since 1972. The Los Angeles Department of Water and Power will resurvey the lake gauges this year, since some of them have shifted since their installation.

Grant Lake Reservoir spilled for the first time since 2000, delivering long sought-after restoration flows to Rush Creek.

Wet year peak flows are essential to the proper functioning of natural streams. They recharge the water table, move sediment that causes channels to migrate, form pools with debris jams, and deposit sediment and seeds on floodplains.

The Mono Lake Tufa State Reserve will be rerouting trails at South Tufa, and while boardwalks may not need pulling up this year, the lake will rise right up to their edges.
Great news! 3,748 acres of land surrounding Cedar Hill in the remote northeast corner of the Mono Basin have been given permanent protection.

Up for auction and slated for subdivision just six months ago, this large parcel’s rugged, unspoiled land is home to rare plants and roaming wild horses. Cedar Hill, which was once an island in prehistoric Mono Lake, is highly visible from today’s shore and throughout the Mono Basin. Its protection assures that Mono Lake’s characteristic scenic views, wide open spaces, and unique natural resources will remain untarnished.

The land was acquired by The Wilderness Land Trust, which purchases private parcels surrounded by wilderness from willing sellers to preserve them for future generations. The Trust purchased the property from owner Mel Arthur in March 2006. The land will soon be transferred into public ownership under the jurisdiction of the Bureau of Land Management.

It is impressive that Arthur, who was once planning to auction the land to the highest bidder, chose instead to make a personal effort to leave a positive environmental legacy at Mono Lake. Arthur, an out-of-state land developer, wasn’t initially aware of the ecological, visual, and cultural importance of protecting the Mono Basin. For years, Committee staff have been talking with him about the significance of Mono Lake and the distinctive character of the Mono Basin.

After hearing about the uniqueness of the Mono Basin, he explored the area and came to know it closely and personally. And then he changed his plans. “I have a deep appreciation for the efforts of local people to protect this remarkable area,” said Arthur. Rather than develop resort homes on the land, or auction it off to someone else for development, Arthur went out on a limb to see if a conservation purchase of the property could work.

“It’s meaningful when we talk about protection for perpetuity,” said Arthur moments after escrow closed for the property. “Perpetuity is a big word to swallow and it tastes real good.”

Protection of the remote property, which currently has no services or utilities, is consistent with the Mono Lake Committee’s vision for the future of the Mono Basin. “We’d like to save the things that are so special about the Mono Lake area,” said Geoff McQuilkin, Co-Executive Director, “the region occupies a special place in the hearts of people throughout California. By protecting his highly visible holdings at Cedar Hill, Mel has done a great thing to establish a Mono Basin legacy for future generations.”

The Wilderness Land Trust stepped in to acquire the land as part of its work assuring wilderness for future generations, doing a great service to Mono Lake in the process. “We keep the promise of wilderness,” said Reid Haughey, President. “Our work is focused on designated wilderness and areas proposed for designation. This property is so compelling that we stepped in with Mel to acquire it after learning how vital its preservation is to the whole region. Our work in the area is otherwise limited to the Wilderness Study Areas in the Bodie Hills and nearby Wilderness Areas in the Sierra.”

Looking southeast from Cedar Hill across the Mono Basin to the White Mountains.

Mono Lake Newsletter – Summer 2006
Mono Lake supporters to the EPA: Keep our air clean!

Huge opposition to the EPA rule change

by Geoffrey McQuilkin

At the end of 2005, the Environmental Protection Agency (EPA) quietly proposed to abandon clean air health standards at Mono Lake. The public response has been loud and clear: Bad idea!

The EPA’s revisions to the National Ambient Air Quality Standards (NAAQS) for particulate matter (PM) have two major flaws. First, they eliminate regulation of windblown dust—just the kind that comes off the exposed bed of Mono Lake. Second, they abandon the relevant particulate regulations in rural areas across the country, including the Mono Basin.

These changes raise serious public health concerns. Not only that, the new regulations would weaken the underpinnings of the State Water Board decision that protects Mono Lake. One of the major reasons the lake is on the road to health is that the Water Board determined that the best way to get the dust storms under control was to put the major dust emitting sections of the lakebed back under water.

The Mono Lake Committee took the EPA proposal very seriously and worked feverishly to rally a major show of concern before the end of the public comment period in mid-April.

To start with, Committee staff contacted members in the Bay Area with the goal of turning out support for Mono Lake at a public hearing held in San Francisco on March 8th. Thank you to members Gordon Matassa, Anna Mills, Kelly Runyon, and Diane Vornoli who joined Co-Executive Director Frances Spivy-Weber to speak on Mono’s behalf. Remarkably, the EPA staff at the hearing seemed unaware of the dust storm situations at Mono and Owens and requested further information.

Committee members also wrote comment letters to the EPA—lots of them! Response was tremendous, with over 2,801 comments submitted on Mono Lake’s behalf. Once again, thank you Mono Lake Committee members—your action and commitment makes a difference!

The Committee also made sure that local organizations and officials heard about the problematic proposal and urged everyone to take action. Response was broad and unanimous. Letters, resolutions, and petitions calling on the EPA to preserve the health standards came from the Mono County Board of Supervisors, Inyo County Board of Supervisors, Mono County Tourism Commission, Mono County Public Health Department, Mono Basin Regional Planning Advisory Committee, Town of Mammoth Lakes, Lee Vining Chamber of Commerce, the Sierra Club Range of Light Chapter, the Bristlecone Chapter of the California Native Plant Society, Friends of the Inyo, June Lake Advocates, CalTrout, the Andrea Lawrence Institute for Mountains and Rivers, Mono Basin Mothers for Clean Air, and a number of individuals, including local property owners.

And that’s not all. Congressional Representative Howard “Buck” McKeon, who represents the Eastern Sierra, weighed in with a call for the EPA to “amend the proposed rule to require coarse PM controls in the Owens Valley and Mono Basin non-attainment areas, as well as in all rural communities threatened by toxic dust, regardless of the source.” California Senator Barbara Boxer submitted a very strong letter of comment, questioning the political motives behind the rules. Senator Dianne Feinstein also commented in support of clean air. The US Forest Service national comments included specific reference to the Mono Basin and Owens Valley situations.

The California Air Resources Board wrote, “Because of the serious nature of PM exposure in California and the voluminous scientific literature demonstrating a clear association between PM exposure and adverse health effects [the Board] adopted stringent standards for both PM$_{2.5}$ and PM$_{10}$ in 2002. We think the US Environmental Protection Agency needs to take action to establish an equally strong NAAQS for PM.”

And there’s more. The Great Basin Unified Air Pollution Control District, which oversees Mono Lake air pollution, wrote an excellent and detailed letter regarding Mono Lake and the Owens Valley. Jim Strock, the former head of California’s EPA, called on the US EPA to rethink its approach.

The Los Angeles City Council weighed in as well, urging the EPA to retain the particulate standards and commenting that “the City of Los Angeles supports and concurs with concerns that have been raised about the proposed revisions ... the
After many years of dreaming about a research facility in Lee Vining, it seems hard to believe that the Mono Basin Field Station is now in its third year of housing visiting researchers!

The Mono Lake Committee and friends put a lot of hard work into the green and white Field Station buildings this past winter. Improvements to the facility include reliable internet and phone access, conversion of two rooms into office space, and new water and electricity lines installed underground. In March, three handy friends of the Committee spent a week refurbishing two previously unoccupied units, and these newly-renovated rooms will stay full all summer long.

As exciting as it is to see Field Station improvements happening, the research taking place in the Mono Basin is even more exciting! As the 2006 summer season kicks into high gear, ten researchers already call the Field Station home. Here is a sampling of their projects:

**Quresh Latif** of UC Riverside is conducting his Ph.D. thesis project on microhabitat preferences and nest predation of Yellow Warblers. Look for his article on page 7 about an interesting discovery made while he carried out his work.

**PRBO Conservation Science biologist Chris McCreedy** has returned to conduct his sixth year of research on the endangered Willow Flycatcher population nesting on Rush Creek.

**PRBO Conservation Science biologist Sacha Heath checks a Cassin’s Finch nest at Rancheria Gulch.**

**Ben Winger** from Cornell University is back to monitor the reproductive biology of Tree and Violet-green Swallows in Lee Vining Canyon as part of the Golondrinas de las Americas project. This Western Hemisphere-wide collaborative project investigates swallows’ responses to global climate change, differences between tropical and temperate ecosystems, and temperate-tropical life history differences in birds.

**PRBO’s Wendy Willis conducts point counts in Long Valley.**

A group from the University of Montana at Missoula is here to study the behavioral endocrinology of high-elevation sparrows. Principal Investigator **Creagh Breuner** and her crew of **Sharon Monsirais, Steve Patterson, and Rachel Sprague** travel to Tioga Pass daily to collect data and take blood samples from White-crowned Sparrows in a high-elevation meadow. At this time of year they need snowshoes and jackets to reach their site!

Creagh and her crew are hoping to gain more understanding about the sparrows’ responses to unpredictable environmental events, like the sudden storms that batter Tioga Pass in early summer. At this time the sparrows stake out nesting territories, which they must hold in order to ensure reproductive success. However, during storms the sparrows must descend to Lee Vining Canyon for food and shelter, leaving their territories vulnerable. Creagh’s group uses their data to investigate the sparrows’ stress physiology, environmental cues, and reproductive success during this time of trade-off for the birds. Later in the summer, **Tom Hahn** of UC Davis will arrive to observe the sparrows’ nesting success and to band the chicks.

Rounding out the Field Station occupants this summer are three biologists working for PRBO’s **Sacha Heath**, who has directed the Eastern Sierra Program since 1998. Sacha and her crew of **Stella Moss, Wendy Willis, and Colin Woolley** are conducting seven summer projects!

1. **Piñon Woodland Monitoring**: PRBO is investigating the effects of the Bureau of Land Management’s piñon pine thinning treatments on songbirds that use both sagebrush and piñon pine habitats.

**Continued on page 7**
The article, “First evidence of conspecific brood parasitism in Song Sparrows with comments on methods sufficient to document this behavior” was published in the May issue of the ornithological journal *The Condor*. It describes the discovery of an interesting behavior in Song Sparrows (*Melospiza melodia*) in the Mono Basin.

Song Sparrow females build nests in which they lay their own eggs and feed their own young until the young are old enough to fly and collect food on their own. In the process of video-monitoring songbird nests to document nest predation, PRBO Conservation Science collaborators and the article’s co-authors Sacha Heath, Grant Ballard, and I recorded a Song Sparrow laying an egg in the nest of another Song Sparrow on Lee Vining Creek. The nesting female struggled to fight off the invader, but the invader succeeded, leaving her egg for the other nesting female to care for. This behavior, known as *conspecific brood parasitism*, has been documented in a variety of other bird species, but never before for Song Sparrows.

In addition to video observation, we also observed more than one egg laid in a single day in each of two other nests monitored at other Eastern Sierra study sites. Since Song Sparrows are only capable of laying one egg per day, these observations are also likely cases of conspecific brood parasitism.

The PRBO team co-authored the article with Dr. Mark Hauber and Dr. Letitia Grenier. Included in the article are Dr. Hauber’s observations of conspecific brood parasitism in Song Sparrows at his study site near Ithaca, NY, and Dr. Grenier’s genetic findings showing that a population of Song Sparrows at her study site in Marin County did not engage in brood parasitism. The article also discusses different methods for documenting this behavior—including egg-marking, video-monitoring, and genetics testing, as well as the value and limitations of each. Identifying ecological factors that encourage some populations to engage in conspecific brood parasitism while others do not would be an interesting avenue for further research.

Spring brought a flurry of activity to the Mono Basin this year. Mono Lake Committee staff were out and about planting trees, pulling weeds, and testing streams—but not without help. Lee Vining Elementary School students, Committee and California Trout volunteers, and Mono Basin residents have made all of this work possible. Thanks to everyone who helped! Here are some highlights.

Monday, April 24th

This year marks the second annual Earth Day tree planting with Lee Vining Elementary School and the Mono Lake Committee. Santiago Escruberia, Assistant Education Director, and Greg Reis, Information Specialist, visited classrooms to prepare the kids for planting trees. They demonstrated how to plant Jeffrey pines and talked about the role students play in the restoration efforts along Lee Vining Creek. The 1997 State Water Board Restoration Order requires Jeffrey pines to be planted along Lee Vining Creek, and the Lee Vining Elementary students are now a part of this historical decision by being part of its implementation.
Tuesday, April 25th

The tree sites were already marked with flags as the group of 40 third through sixth graders came cheerily down the trail. Teams of four kids dug holes into the tough, rocky soil and then shouted “Tree Guy!” or “Tree Girl!” for Committee staff to deliver the Jeffrey pine seedlings. Meanwhile, a bucket brigade brought water from the creek to keep the trees well watered. These hard-working students were definitely not afraid to get a little dirt on their hands!

Within a few hours the kids had planted 100 trees and headed back up the trail picking up trash and old tires along the way. Many thanks to the Lee Vining kids, Ms. Silliker, Ms. Aas, and several parents for all their help.

Saturday, May 13th

Volunteers gathered outside the Mono Lake Committee and prepared to remove the non-native plant Bouncing Bet, which outcompetes other native species. With a variety of tools they marched down the Lee Vining Creek trail. Not even thirty feet down the trail the first plant appeared—bright green leaves poking out from under rocks and cascading down the slope towards the creek.

The mission of the day was not only to rid the Lee Vining Creek area of as much Bouncing Bet as possible, but also to test different eradication methods. By lunchtime the group had uprooted several trash bags worth of Bouncing Bet and set up two test plots to monitor the work. The test plots were placed on two types of terrain: a sloping disturbed area set back from the creek and a section adjacent to the creek. Each test plot was then divided into three subsections to test:

1. Removing the Bouncing Bet at the ground’s surface
2. Pulling out the entire root system by manual methods
3. Placing a black tarp over the plants

In the coming weeks and months Committee and Forest Service staff will check the status of the test plots and refine removal efforts accordingly.

The group spent the afternoon down by the delta of Lee Vining Creek amidst the first blooms of desert peach and the ever-prevalent Bouncing Bet. The energetic crew went to work removing new sprouts between the channels of Lee Vining Creek—carefully avoiding nesting Spotted Sandpipers and Killdeer. By the end of the day the group was weary, but very satisfied to see the back of the Forest Service pickup truck overflowing with their work!

Saturday, May 20th

CalTrout and Mono Lake Committee volunteers joined together for another tree planting day. The large volunteer group was able to get 150 trees safely in the ground by early afternoon!

Walking down Lee Vining Creek you can see the subtle differences volunteers have made—the young Jeffrey pine trees are thriving in the rocky soil and where Bouncing Bet has been removed the soil is now clear for native vegetation to return. These opportunities remind us that we can all be a part of the restoration of Mono Lake.

Clare Cragan is the Committee’s Policy Coordinator. You might see her on the creek trail wearing her “No Bouncing Bet” pin and shouting, “Get that Bet!”

Volunteers remove Bouncing Bet, an invasive plant species, from along the Lee Vining Creek trail.

Vining Creek amidst the first blooms of desert peach and the ever-prevalent Bouncing Bet. The energetic crew went to work removing new sprouts between the channels of Lee Vining Creek—carefully avoiding nesting Spotted Sandpipers and Killdeer. By the end of the day the group was weary, but very satisfied to see the back of the Forest Service pickup truck overflowing with their work!

How you can help

Volunteers are needed for ongoing restoration projects. If you are interested in volunteering please contact Clare (clare@monolake.org) at (760) 647-6595.
On April 24th, a delegation of Los Angeles leaders arrived in Mammoth Lakes. Their goal: begin building a new relationship between the city—particularly the Los Angeles Department of Water and Power (DWP)—and the Eastern Sierra.

Lead by DWP Commission President Mary Nichols, the group included three of the five Commissioners, the DWP General Manager, the Los Angeles Deputy Mayor for Energy and the Environment, and many other senior DWP staff members. In the 102 years that Los Angeles and the Eastern Sierra have been intertwined by issues of water, the visit was the first time DWP Commissioners have ever made such a group effort.

The goal of the visit was to “open a dialogue” said Commissioner David Nahai. Recognizing the decades of contentious and often bitter relations between DWP and the region, Nahai added that “the trip here is to overcome a lack of trust.”

“There are real opportunities,” said Commissioner Nichols, “to build relationships between the city and the ranchers and open space and rural communities that are the Eastern Sierra.” Nichols promised to return frequently to the area. In fact, she has done so once already.

Los Angeles Mayor Antonio Villaraigosa “wants to make LA the greenest city in the country,” said Deputy Mayor Nancy Sutley, “and he recognizes the unique relationship with the Eastern Sierra.”

The delegation met with Mono County leaders and citizens, including holding a public meeting focused on discussion of how DWP’s current land management policies—which preclude development of tens of thousands of acres of Eastern Sierra land owned by the city of LA—might be transformed into a long-term, mutually beneficial commitment. Afterward, the delegation continued on to two days of meetings in Inyo County.

The Mono Lake Committee was well represented during the visit. The Committee has long sought to build a productive relationship with DWP and is pleased to see that DWP’s new leadership is looking in the same direction. One visit, of course, cannot dispel a hundred years of history. The signs are positive, and the real proof will be in the next steps. Stay tuned to see if these good intentions can translate into real, long-term projects, commitments, and dialogues.

Air quality from page 5

City expects the national ambient air quality standards to be protective of public health, as mandated by the Clean Air Act.”

Last, but certainly not least, the Mono Lake Committee produced a 22-page comment letter developed by staff, attorneys, and Mono Lake dust experts. The Committee laid out detailed scientific and legal evidence in the letter. In summary, the letter:

• Argued that the EPA must recraft the NAAQS to equal or exceed current coarse particulate matter standards in the Mono Basin and Owens Valley nonattainment areas.

• Presented evidence showing that this is the only way to bring the NAAQS into accordance with the facts and the mandate of Congress.

• Demonstrated that the air quality degradation that occurs in the vicinity of Mono and Owens lakes is unarguably a threat to human health by virtue of the extreme particulate concentrations and toxic particulate content.

• Argued that the lack of any analysis by the EPA of the Mono and Owens dust storms is a serious flaw of the NAAQS.

• Pointed out that Congress has specifically called for the Mono Basin and Owens Valley dust storms to be regulated.

What does all this add up to? Certainly a clear and consistent call for the EPA to abandon its flawed approach to revising the standards. What will the EPA actually do? That’s unknown. What we do know is that the EPA must issue the final standards in late September. If they fail to protect public health again, litigation is certain, and the Committee will be ready to represent Mono Lake’s interests in that process.

The complete Mono Lake Committee comment letter is available online at www.monolake.org or by request; contact Geoff (geoff@monolake.org) at (760) 647-6595.
New trail to Mono Lake

The US Forest Service is proposing to construct an interpretive hiking/biking trail that will connect the Mono Basin National Forest Scenic Area Visitor Center to the Old Marina site on the west shore of Mono Lake. The trail will be three miles round-trip, will utilize some existing dirt roads in the area, and will also require the construction of some new trail to completely connect the Scenic Area Visitor Center to Old Marina. The routing for the new, additional parts of the trail was carefully studied and planned to minimize environmental impacts.

Currently, access to the lake requires driving because there isn’t a clear and marked trail. Visitors are frequently disappointed to learn that they cannot easily walk from the Visitor Center to Mono Lake. The new trail will greatly enhance the visitor experience and improve access by facilitating walking down to the lake from the primary visitation site in the Mono Basin.

The Scenic Area Visitor Center Trail is a collaborative project with many partners: the US Forest Service, Mono Lake Committee, California State Parks, Los Angeles Department of Water and Power, and Friends of the Inyo. Construction will begin in fall 2006 pending available funding.

Caltrans guardrail maintenance project

Caltrans is planning to replace the existing guardrail for a 3.2-mile stretch of Highway 395 along the west shore of Mono Lake. Erosion below Hwy 395 in this particular section has weakened the guardrail supports and will require that Caltrans move the guardrail system towards the highway by approximately three feet. In one 300-foot section where this adjustment is not feasible, Caltrans will need to install a low guardrail-retaining system below the highway.

Replacing the guardrail in this section of highway was originally a component of the Mono Lake Shoulder Widening Project (see Summer 2005 Newsletter). In October 2004 the Mono County Local Transportation Commission voted unanimously to suspend the project and it currently remains on hold. Replacing the guardrail has been identified as an urgent safety-oriented maintenance project and shouldn’t significantly affect Mono Lake or nearby wetlands— as long as Caltrans implements the project as promised.

The Committee and the Forest Service continue to urge Caltrans to incorporate a more visually acceptable guardrail such as the self-weathering metal guardrails used in Death Valley National Park. At this point Caltrans has declined to go this route and plans to reuse the existing guardrail. When funding becomes available, Caltrans has agreed to revisit this issue and consider a treatment that is more visually sensitive for a highway within the Mono Basin National Forest Scenic Area. The Committee will continue to advocate for this approach.

Cunningham’s development threat—hot and cold

In early April of this year it appeared as though the Cunningham property, a 120-acre parcel located on the west shore of Mono Lake within the boundary of the Mono Basin National Forest Scenic Area, was in jeopardy of being transferred from Mammoth Mountain Ski Area (Mammoth Mountain) ownership back into the hands of the previous owner and becoming a development threat once again.

According to a press release issued on April 5, 2006, former owner Bill Cunningham had exercised his option to purchase the property back, which he was allowed to do under the original purchase agreement. For reasons unknown, Cunningham backed out of this option before escrow was slated to close on May 12th.

While the immediate threat of development has been averted once again, the Committee remains vigilant over the precarious nature of this real estate transaction. Committee attorneys recently submitted a letter to the Mono County Planning Department outlining various ways that the proposed development project is inconsistent with the Mono Basin National Forest Scenic Area Guidelines and the Mono County General Plan.

In March 2005, Mammoth Mountain purchased the Cunningham property, assuring all interested parties that it had no plans to develop the parcel (see Summer 2005 Newsletter). In fact, Mammoth Mountain has committed to using the Mono Lake property as part of an exchange for Forest Service land at Mammoth Mountain itself. A potential land trade with the US Forest Service would eliminate the immediate and long-term threat of development and assure that the integrity of the Scenic Area remains into the future.

Lisa Cutting is the Committee’s Eastern Sierra Policy Director. When she’s not out hiking or fishing you can find her spreading topo maps out on the floor and tying up flies!

Lisa Cutting
Second wet year in a row causes Grant Lake Reservoir to spill

by Greg Reis

The final 2006 runoff forecast is 147% of average—a “wet” year according to the Water Board order. The Los Angeles Department of Water and Power (DWP) admits there is uncertainty in the forecast, since some data normally available from Southern California Edison (SCE) is missing.

Available evidence suggests that runoff will be higher than 147%. Last year’s runoff was 150% of average, and this year’s precipitation and snowpack were greater. Precipitation in April set a new record and was well above average in May. Every other basin in the Sierra has a higher runoff forecast than the Mono and Owens basins. The basins to the north and west are likely to see about 180% of average runoff, and even the eastside’s Walker Basin is slated for 188% of average runoff.

Another major difference from last year is that the snowpack is greater at the highest elevations—over 180% of average in places—and is much less at the lower elevations. This means the pattern of runoff could be different, with higher flows later into the summer.

On May 22, 2006, Grant Lake Reservoir spilled for the first time since 2000. Last year’s high runoff filled the reservoir, and this year that water is spilling over the dam, delivering higher flows to lower Rush Creek and Mono Lake. Last year’s peak flow above the reservoir almost reached 450 cubic feet per second (cfs), and a similar flow could be expected to spill over the dam this year.

This year DWP is required to deliver 450 cfs to lower Rush Creek for five days, followed by 400 cfs for ten days. This means DWP may still have to augment Rush Creek with water diverted from Lee Vining Creek to meet the peak flow requirements on Rush, as it did last year when it wasn’t able to take advantage of a spill.

Everyone involved in the restoration effort would like to see the Rush Creek peak flow maximized this year, and it remains to be seen if the weather, SCE reservoir releases upstream, and the Lee Vining augmentation will combine to meet our expectations.

Greg Reis is the Committee’s Information Specialist. He’d like to acknowledge the passing away in February of Luna Leopold, the son of Aldo Leopold. Considered by many to be the father of river restoration, Luna advanced the scientific knowledge of how rivers work more than any other individual. A list of 182 of his publications, many available to download, can be found on the Web here: http://eps.berkeley.edu/people/lunaleopold/.

Mono Lake may reach levels not seen since 1972; meromixis returns

by Greg Reis

This year Lee Vining had its 2nd wettest winter on record: 22 inches of precipitation by the end of May. This is 184% of average. March was the coldest and April was the wettest on record, and May rainfall was almost 170% of average.

On April 1, 2006, Mono Lake was the same level as it was on that day in 1998: 6383 feet above sea level. In 1998 the lake rose 1.5 feet by the end of August, and that year there was almost no rainfall from April through August. Already at the end of May, this year, Mono Lake is rising a tenth of a foot faster each month.

This year, with a wetter April and May and reservoirs holding 5,000 acre-feet more water, combined with greater runoff forecasted this year than in 1998, Mono Lake is likely to rise two feet by the end of August and could possibly exceed its 1999 highstand of 6385.1 feet.

It is possible that Mono Lake will be spreading back into territory that hasn’t been submerged by lakewater since 1972! This would put it within six feet of the target level of 6391 feet.

There are some other ramifications of a big water year as well. The boardwalk platform at the end of the County Park boardwalk will have the lake underneath it, raising a question for the State Reserve: should they pull it up this year in anticipation of a wet year next year, or wait to see if next year is dry? Trails at South Tufa are also being rerouted to higher ground.

Most significant for the lake ecosystem is UC Santa Barbara researcher Dr. Robert Jellison’s observation that the lake failed to complete its annual mixing process during the winter (called meromixis). He says the upper mixed layer is relatively deep, so for now the stratification is having minimal effects on lake productivity. The inflow of fresh water this year, however, will likely result in more noticeable effects next year. For more information on meromixis visit www.monolake.org.
All winter the trees make noise as the cold wind threads through their bare branches, but now the leafy green treetops are alive with new sounds. In my neighborhood, it’s the raucous cacophony of roaming flocks of Yellow-headed Blackbirds. They often hide, leaving the impression that an innocuous tree has just let loose with a tremendous noise.

The birds are a sign of spring and the coming summer, seasons you can’t fail to notice if you’ve been down walking along Mono Lake’s tributary streams. Winter is draining away; the streams flow fast, cold, and full of their own rushing sounds. The lake is rising quickly as a result, the water’s edge creeping outward into the lakeshore grasses. Over at the County Park boardwalk, the lapping waves are drawing closer to the observation platform frequented by visitors and locals alike. Built in anticipation of a day—perhaps later this year—when salty waters would reclaim this stretch of lakebed and reconfigure the shoreline, the planks can be unbolted, the supports lifted and moved.

Back in 1990, this boardwalk followed a different—longer—route to the shore of the then-smaller, still-imperiled lake. Would protection from excessive water diversions be achieved? The question was open and the Water Board decision four years away. Now we know the answer and tufa that were trailside curiosities back then have become islands in the lake.

The same could be said out by Negit Island. The landbridge linking shore to island, once so readily hiked by people and predators, is now an island. The flanks of what we locally call Gaines Island slope into the lake producing a miles-long spectrum of color, ranging from the bright white of the island to shallow-water shades of blue, to the deeper greens of deeper water, all as the island shrinks beneath the rising lake.

Geoff McQuilkin is the Committee’s Co-Executive Director. He is enjoying his 18-month-old daughter’s surprise at the existence of warm weather.
How far is it?

Distance from Lee Vining to:

- South Tufa .......................... 11mi 18km
- Yosemite Park entrance 13 21
- Tuolumne Meadows .... 21 34
- Mammoth Lakes .... 27 44
- Bodie ......................... 32 52
- Bishop ....................... 66 106
- Yosemite Valley ........ 77 124
- Lake Tahoe .............. 110 177
- Reno ...................... 140 225
- Death Valley ........... 177 285
- San Francisco (via 120) 250 402
- Los Angeles .......... 303 488
- Las Vegas .............. 326 525

Mono Lake and Vicinity Map

Lee Vining Town Map
For walking around town

Mono Lake and Vicinity Map

Lee Vining Community Center

Mono Basin Historical Society Museum

Mono Lake Committee
Information Center & Bookstore

Lee Vining Community Center

US Forest Service Visitor Center

First St.

Second St.

Third St.

Fourth St.

Lee Vining Ave.

Post Office

Hwy 395

Hwy 167

Hwy 270

To Hawthorne, NV

To Bridgeport,
Reno,
Lake Tahoe

Conway Summit

Conway Ranch

Lee Vining

Lee Vining Creek

Lee Vining Ave.

Mono Lake

Hwy 120 east

Rush Creek

Panum Crater

To Benton

To Mammoth Lakes, Bishop, Los Angeles

Hwy 205

To Mammoth Lakes, Bishop, Los Angeles

June Lake

To Mammoth Lakes, Bishop, Los Angeles

Las Vegas 326 525

San Francisco (via 120) 250 402

Death Valley 177 285

Reno 140 225

Lake Tahoe 110 177

Bodie 32 52

Bishop 66 106

Yosemite Valley 77 124

Mammoth Lakes 27 44

Tuolumne Meadows 21 34

Yosemite Park entrance 13 21

South Tufa 11mi 18km
There is a lot to do in the Mono Basin! Stop by the Mono Lake Committee when you’re in town and our knowledgeable staff can help.

- **South Tufa tours** take place three times a day during the summer and are an excellent introduction to Mono Lake. Join a naturalist on a walking tour at the South Tufa Area to learn about the ecology, geology, and natural and human history of the Mono Basin. The walk is approximately one mile long on easy terrain and lasts about an hour. Meet at the South Tufa parking lot at 10:00AM, 1:00PM, and 6:00PM daily during the summer months. There is no charge for the walk, but a $3 per person fee is required to enter the South Tufa Area. No reservations are necessary.

- **Canoe tours** depart every Saturday and Sunday morning during the summer months at 8:00, 9:30, and 11:00AM, and last for about one hour. $20 for adults, $10 for children. Reservations are required; call (760) 647-6595.

- **Bird walks** take place Fridays and Sundays at 8:00AM throughout the summer. Meet at the Mono Lake County Park with binoculars (not required), a bird book, hat, and sunscreen. Tours last 1½–2 hours and are open to all levels of birders. Committee staff can also suggest good birding areas around the Basin.

- **Lee Vining Creek hikes** are a great way to experience the Mono Basin! Come prepared with water, hat, sunscreen, and binoculars (if you like) for a two-hour walk along the moderate Lee Vining Creek trail. Learn about restoration, natural history, and human history as you go. Stop by the Mono Lake Committee Information Center & Bookstore or call (760) 647-6595 for tour days and times.

**Visitor Centers**

- **The Mono Lake Committee Information Center & Bookstore**, located in the heart of Lee Vining, offers a free video, educational exhibits, a fine art exhibit, and activity schedules. The bookstore offers an excellent selection of regional books, maps, T-shirts, posters, local crafts, and specialty gifts. The Committee also houses the Lee Vining Chamber of Commerce with information on lodging, dining, and recreation opportunities as well as weather and road conditions. Come on by to make the most of your visit! The Mono Lake Committee is open from 8:00AM–9:00PM daily during the summer, or call (760) 647-6595 for more information.

- **The Mono Basin National Forest Scenic Area Visitor Center**, located just north of town, features an excellent view of Mono Lake, interpretive displays, and natural history trails. A dramatic film on Mono Lake shows regularly in the theater, and during the summer rangers give patio presentations daily. Open Sundays–Thursdays from 8:00AM to 5:00PM, and Fridays–Saturdays 8:00AM to 7:00PM; contact the Visitor Center at (760) 647-3044 for more information.

- **The Mono Basin Historical Society Museum**, located in Lee Vining at Gus Hess Park, houses a fascinating collection of materials from the Mono Basin’s past. See Native American artifacts, gold mining implements, and even the legendary upside-down house! Open Thursdays–Mondays from 10:00AM–5:00PM and Sundays 12:00–5:00PM. There is a $1 charge but children under the age of 13 are free. Contact the museum at (760) 647-6461 for more information.

**Travel Resources**

- Mono Lake Committee Information Center  
  (760) 647-6595  www.monolake.org
- Lee Vining Chamber of Commerce  
  (760) 647-6629  www.leevingning.com
- US Forest Service Scenic Area Visitor Center  
  (760) 647-3044  www.fs.fed.us/r5/inyo/about
- Mono Lake Tufa State Reserve  
  (760) 647-6331  www.cal-parks.ca.gov
- Bodie State Historic Park (760) 647-6445
- Mammoth Lakes Visitor Center (760) 924-5500
- June Lake Chamber of Commerce (760) 648-7584
- Bridgeport Chamber of Commerce (760) 932-7500
- Inyo National Forest 24-hour Wilderness Permits/Info  
  (760) 873-2408  www.fs.fed.us/r5/inyo
- Yosemite National Parkconst (760) 934-2289  www.nps.gov/depo
- White Mountain Ranger District–Bishop (760) 873-2500
- Lone Pine Interagency Visitor Center (760) 876-6222
- Manzanar National Historic Site (760) 878-2932  www.nps.gov/manz
- Death Valley Reservations (760) 786-2345
- Bridgeport Ranger Station–Toiyabe National Forest  
  (760) 932-7070
- California Road Conditions (800) 427-7623
MONO BASIN FOOTPRINTS T-SHIRTS
Retail Manager Brett Pyle and his wild things Casey and Sabine model our newest T-shirt. It’s a wildlife tracking guide for the Mono Basin that’s always handy! This custom design features glow-in-the-dark ink on a midnight blue shirt. The message “Tread Lightly at Mono Lake” is on the left sleeve. Remember to take only pictures and leave only footprints! Available in adult and youth sizes. 100% cotton. Made in the USA.

Adult Footprints T-Shirt Sizes Small–X-Large: $18.00, XX-Large: $21.00
Youth Footprints T-Shirt Sizes X-Small–Large: $15.00

MONO LAKE COMMITTEE CUPS AND WATER BOTTLES
We have three exciting new styles of stainless steel drink containers this year: A 12-ounce double-wall insulated mug with screw-on lid and blue carabiner handle to easily clip it to a pack; an 18-ounce double wall insulated travel cup with spill proof sip top lid; and a 27-ounce single-wall water bottle from Klean Kanteen—specially made in blue for Mono Lake! These rugged designs won’t leach chemicals into your drinks, and are easy to clean.

12 oz. Insulated Carabiner Mug: $12.95
18 oz. Insulated Travel Cup: $12.95
27 oz. Klean Kanteen Water Bottle: $18.95

MONO LAKE PATCH
We brought back this classic patch that will brighten up any vest, jacket, or backpack to let everyone know that your heart is at Mono Lake. The patch shows a golden sun rising over tufa with the message: “Mono Lake It’s Worth Saving.”

Embroidered Cloth Patch, 3” x 3”: $3.95

THE NAKED BEE PRODUCTS
This wonderful line of products features the motto, “All of the good stuff, none of the bad stuff.” Paraben-free. No propylene glycol. No drying alcohol. No laurel sulfate. No dyes or pigments. No mineral oil. No EDTA. Phalate-free fragrance. No animal testing. Just great personal care products with a wonderful Orange Blossom Honey scent. One of our most popular new products in the store!

Moisturizing Hand and Body Lotion, 2.25 fl. oz.: $4.75
Gentle Cleansing Shampoo and Conditioner, 2.25 fl. oz.: $4.75
Oatmeal and Honey Triple Milled Soap, 2.75 oz.: $2.75
Lip Balm, SPF 15: $2.75

Call (760) 647-6595 to order
**CHIURA OBATA NOTECARD SET**

This beautiful set was produced by Pomegranate Press in conjunction with the Fine Arts Museums of San Francisco. It features four of Obata's vivid woodblock prints cut between 1928–1930. The set includes: Before Thunderstorm Tuolumne Meadow, Evening Glow of Mono Lake, Evening Glow of Yosemite Waterfall, and Lake Basin in High Sierra. Cards are printed with soy-based inks on recycled paper. Twenty cards, five each of four designs, 4¾” x 5¾”, with envelopes.

*Chiura Obata Notecard Set, 20 cards with envelopes: $15.95*

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**MONO BASIN CHIURA OBATA NOTECARD SET**

This set of four Mono Basin woodblock prints is carried exclusively by the Mono Lake Committee. Designs include: Lee Vining Creek Trail 1927, Along Mono Lake 1927, Before the Rain Mono Lake 1930, and Morning at Mono Lake 1930. Large 5” x 7” cards printed on recycled paper with vegetable-based inks. Eight cards, two each of four designs.

*Mono Lake Obata Notecard Set, 8 cards with envelopes: $11.95*

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**2007 MONO LAKE CALENDAR**

The 2007 Mono Lake Calendar is full of beautiful images of Mono Lake and the Mono Basin. From recovering streams to breathtaking sunrises and flocks of birds, this 12-month calendar captures many unique views. Each month also features inset photos of local flora and fauna. Can’t get to Mono Lake as often as you would like? This is a great way to catch a glimpse of the Mono Basin through the months and seasons of the year right in your home or office! Makes a great gift too. Printed in the USA on recycled paper.

*2007 Mono Lake Calendar, measures 13¼” x 9¼”: $11.95*

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**Order by phone: (760) 647-6595, fax: (760) 647-6377, or email: bookstore@monolake.org**
Editor’s note: Mike Thomas and Jack Farmer are studying Mono Lake’s mysterious tufa towers, uncovering new answers and new questions too. We thought Mono Lake enthusiasts, especially those into science, would enjoy learning more of the details behind the formation of this much-loved geologic wonder straight from the researchers themselves.

Take a look at a piece of dry tufa along the Mono Lake shoreline, and chances are you’re looking at a microbial habitat, or at least the remnant of one. Above the shoreline, tufa surfaces can be a home for both living and dormant microorganisms. Within tufa interiors, microbes may also live as endoliths (literally, “within rock”), occupying microscopic cracks in the tufa, or dissolving the carbonate minerals with organic acids. Below the lake surface, both newly formed tufa deposits, as well as tufa surfaces recently re-submerged by the rising lake level, are home for flourishing microbial communities, called biofilms. Indeed, submerged tufa surfaces look green, reflecting the presence of films of chlorophyll-pigmented photosynthetic communities.

Our studies are revealing that these microbial ecosystems contribute substantially to the formation of the tufa by enhancing the precipitation of carbonate minerals from lake waters. They also alter primary tufa fabrics and mineral compositions once the deposits have been laid down.

The formation of Mono Lake’s tufa towers has long been a subject of controversy. The most widely held view is that the tufa towers form inorganically, at sites where calcium-rich spring waters mix with bicarbonate-rich lake waters. Our research has been looking at tufa towers using more integrative methods of geomicrobiology to investigate the ways in which microbial communities may influence tufa deposition and how microbial processes alter the tufa after they have formed.

Microbial populations change in response to seasonal and longer-term changes in the climatic and geochemical conditions of the lake. At a microscale, transient environments near tufa surfaces and within tufa interiors provide opportunistic environments where microbial populations take advantage of local biogeochemical conditions in order to meet their energy requirements. Where conditions are stable, microbial ecosystems may begin to actively control microenvironmental conditions through their combined metabolic processes and the active biological cycling of elements. Our research has been showing that microorganisms may play a key role in tufa deposition by acting as nucleation sites for precipitating minerals, and by altering microscale pH conditions and elemental concentrations favorable for carbonate precipitation.

Geomicrobiologists have long suspected common physiological processes, such as photosynthesis and sulfate reduction, may induce carbonate precipitation in microbial biofilms. Our work suggests that these processes may also be common on tufa surfaces in Mono Lake. As microbes induce the precipitation of carbonate minerals, they may also become entombed and preserved as fossilized biosignatures.

We have observed that some tufa minerals may precipitate preferentially on and within certain types of microbial biofilms. For example, the mineral gaylussite (hydrated sodium carbonate), a widespread mineral in Mono Lake, typically precipitates in close association with cyanobacterial biofilms, entombing numerous microbes within the crystals that form. Gaylussite is metastable and quickly transforms to more stable forms of calcium carbonate (calcite and aragonite). Depending on local microenvironmental

Continued on page 25
Getting outside on the Eastside just got easier

by Elin Ljung

To keep track of all the wonderful outdoor activities in the Eastern Sierra, the local non-profit community has created a collective online calendar of natural history events called Outside on the Eastside at www.outsideontheeastside.org.

Outside on the Eastside lists events by date in the Natural History Events Calendar, or you can click on your favorite organizations to see upcoming projects on their respective websites.

In its inaugural season, the calendar already boasts numerous announcements of upcoming events. The site includes notices for trail restoration, canoe tours, natural history lectures, Sierra Club outings, volunteer opportunities, and the Mono Basin Bird Chautauqua!

Since the idea for Outside on the Eastside came from the Environmental Roundtable—a quarterly meeting of regional non-profit organizations—the Mono Lake Committee is in good company on the website: other local organizations include Eastern Sierra Audubon, the White Mountain Research Station, Friends of the Inyo, the Owens Valley Committee, the Eastern Sierra Land Trust, and the Bristlecone Chapter of the California Native Plant Society. It is exciting to see so many outdoor events grouped in one place!

The online calendar is intended to keep local nature enthusiasts informed. It is also a useful tool for local businesses and visitor centers, who can print out a calendar when visitors ask “What’s going on this week?” It is already being put to good use at the Mono Lake Committee Information Center & Bookstore.

Community groups, non-profits, and agencies are welcome to announce events on the online calendar. If you would like to help make this calendar a success, Outside on the Eastside is looking for community sponsorships to help pay for site maintenance of this online resource. Email Jamie Anderson at jamie@friendsoftheinyo.org for more details.

RSS feeds up and running at www.monolake.org!

by Elin Ljung

If you’ve visited the Mono Lake Website recently, you may have noticed an orange box on the front page indicating the new RSS feed for current event headlines. RSS stands for “really simple syndication” or “rich site summary,” depending on who you ask, and the Mono Lake Website’s three new RSS feeds are a new way to keep members and friends in touch with Mono Lake!

RSS feeds take articles from a Website and condense them into headlines and short summaries, thereby preparing them for distribution into the greater Web world. For example, if you click on “Mono Lake News and Events” at the Mono Lake Website homepage, you’ll find a list of all current events with short excerpts from the articles. Clicking on any headline from the list will take you to the full article.

The syndication part of RSS feeds refers to the process of publishing in more than one online location at the same time—a great way to get news about Mono Lake in more places on the Web. One of the easiest and most convenient ways to use RSS feeds is to subscribe to an RSS reader service such as My Yahoo! that allows you to collect all your favorite RSS feeds into one page.

Using an RSS reader service, a Mono Lake Committee member from almost anywhere in the world can choose to see the latest headlines from the LA Times, weather reports, and Mono Lake current events, all on one web page! Information Specialist Greg Reis has also set up RSS feeds for the Mono Lake Newsletter and the Mono Basin Clearinghouse (www.monobasinresearch.org).

Add the Mono Lake Website’s RSS feeds to your reader service and stay up to date on happenings at Mono Lake!
South Shore Kayak

June 11
Stuart Wilkinson and Mono Lake Committee Staff
$90 per person/ $80 for members

Late spring reveals snow-capped mountains towering over Mono Lake—a great time to kayak! Join Stuart Wilkinson and a Mono Lake Committee staff member for a guided naturalist expedition along Mono’s south shore. Your leaders are well versed in Mono Lake geology, ecology, history, and politics. This natural history kayak tour will cover a wide variety of topics relating to this unusual Great Basin lake. Plan on four to five hours for the tour. Expect to see underwater tufa towers, birds, brine shrimp, and lake-bottom springs. Some kayak experience is helpful, but not necessary. Kayaks and safety equipment are provided. This seminar is being offered for the 10th year in a row, and is highly rated by past participants. Please note that this year’s kayak seminar is on a Sunday. Space is limited in this popular seminar, so register early!

New!
Register online at
www.monolake.org/main/seminars.htm

Birding the East Side

June 14–16
David Lukas
$140 per person/ $125 for members

Looking to get a little focused birding in before the Mono Basin Bird Chautauqua? This field seminar will concentrate on the identification and ecology of birds in the Mono Basin and local Eastern Sierra. Visit a wide variety of habitats including desert scrub, marshes, riparian forests, and mountain slopes in search of breeding birds and a few late migrants. With over 300 species having been observed in the Mono Basin, this course will be of great interest to both beginning and more advanced birdwatchers. The class will explore a number of sites intensively, mixing short leisurely walks with periods of observation and natural history discussion—taking time to learn about birds by watching them closely. Generally, walks will be chosen for their accessibility, but participants should be prepared and capable of wandering off-trail in pursuit of special sightings. David Lukas has led over one hundred birdwatching and natural history programs for the Nature Conservancy, Yosemite Association, Audubon Society, Elderhostel, and other groups. He is the author of Watchable Birds of the Great Basin, Wild Birds of California, and the recently revised Sierra Nevada Natural History. He is hard at work on an upcoming field guide to birds of the Sierra Nevada, and a website on North American bird identification: www.whatbird.com. This seminar begins on a Wednesday morning, leading up to the 5th Annual Mono Basin Bird Chautauqua.
Wildflower Macro-Photography in the Mono Basin
July 7–9
David Gubernick
$225 per person/ $200 for members
Enrollment limited to 10 participants

Learn to take creative and beautiful close-up images, further develop your artistic vision, and enhance your photographic skills in the warm and supportive learning environment of this new workshop for beginning to advanced amateur photographers. The workshop will be conducted in the Mono Basin and upper reaches of the Sierra and includes classroom instruction, demonstrations, and individual coaching in the field that will help you take your photography to the next level. Evenings will be spent discussing and providing feedback on participants’ fieldwork as well as prior work (please bring 10–15 examples). Also learn the identities of the flowers you photograph. Both film and digital cameras are welcome. Further information, reading material, and a recommended supplies list will be sent to registered participants. David Gubernick, Ph.D., is an internationally and nationally published and award-winning nature photographer and workshop leader. Some of his exhibition prints can be seen at Gallery Sur in Carmel and the Ventana Inn and Spa in Big Sur. He provides fine art prints and stock images for the advertising, corporate, editorial, and home décor markets. His first photography book, *Wildflowers of Monterey County* was published in 2002 and has been a best-seller, garnering rave reviews. He is currently working on several other photography books, including one on the wildflowers of the Mono Basin. This seminar begins on a Friday evening.

Moths and Butterflies in the Mono Basin
July 21–23
Paul McFarland and Bartshé Miller
$130 per person/ $115 for members

Join local naturalists Paul McFarland and Bartshé Miller for an exploration of butterflies and moths in the Mono Basin. With everything from desert alkali flats to alpine rock gardens, the Mono Basin is an excellent place to get acquainted with these bright splashes of living color. This seminar will focus on using Jeffrey Glassberg’s wonderful field guide *Butterflies through Binoculars* to learn the basics of “butterflying.” Identifying host plants, understanding the life cycle of butterflies, migration, habitat preferences, and their relationship to the entire ecosystem will all be covered. The group will also spend a night with moths, venturing out on a Saturday evening to observe a world of Lepidopterae (and other creatures!) not found in daylight.

Identifying High Country Wildflowers
August 4–6
Mark Bagley
$140 per person/ $125 for members

At the headwaters of Lee Vining Creek there’s a rich summer display of wildflowers, shrubs, and trees along cascading creeks, jewel-like lakes, green meadows, and rocky granite slopes. There, amid the towering peaks of the Sierra at the source of Mono Lake’s water, learn how to identify this great diversity of plants using Norman Weeden’s *A Sierra Nevada Flora*. This is the most complete small field guide to Sierra plants and provides identification keys and plant descriptions that minimize the use of special terminology and are suitable for use by beginners. This weekend’s seminar will begin Friday evening with a three-hour hands-on session to introduce the basics of plant identification for beginners, including basic plant structures and essential terminology. Saturday and Sunday will be spent in the field on a couple of easily paced short walks (generally less than a mile) at high elevations (generally above 9,000 feet) with much more time stopping and keying out plants than walking (bring a folding chair or stool). Mark is a consulting botanist in the Eastern Sierra and Mojave Desert who has been leading field seminars in the Mono Basin since 1988. He is well known among past seminar participants for his easy-going pace and engaging teaching style in the field.

Throughout this seminar, we will also be keeping an eye out for other creatures including, but not limited to, dragonflies, damselflies, beetles, and of course, the larger winged creatures that eat them all. Beginning Friday evening with an introductory slide presentation, the group will spend the next two days leisurely exploring the alkali meadows along Mono Lake, fluttering aspen groves, and alpine trails. Last year, seminar participants identified over 50 species of butterflies, moths, and dragonflies from the shore of Mono Lake to the headwaters of Lee Vining Creek near Yosemite National Park. Paul McFarland lives in Lee Vining, is the Executive Director of Friends of the Inyo, and has spent the last several summers chasing down anything with wings around Mono Lake. Bartshé Miller is the Mono Lake Committee’s Education Director. He has been raising a few moths at home, and has taken to bright lights on moonless summer nights.

www.monolake.org/main/seminars.htm or (760) 647-6595 to register
Introduction to High Country Plants and Habitats
August 11–13
Ann Howald
$140 per person/ $125 for members

This class will explore the mosaic of habitats that make up the Eastern Sierra high country—lush flower-filled meadows fed by meandering streams, sagebrush-covered slopes, forests of hemlock, lodgepole and whitebark pines, subalpine lakes bordered by willows, and flowery rock gardens. The class will focus on sight identification of common trees, shrubs, and wildflowers, but won’t neglect any birds, bugs, or critters that come to check the group out. With any luck, you’ll be zoomed by hummingbirds defending their patches of paintbrush and columbine, and see noisy Clark’s Nutcrackers collecting and storing whitebark pine seed. This weekend’s seminar will begin Friday evening with an introduction to the basics of plant identification and a slideshow preview of some of the habitats and plants to be seen during the fieldtrips. Walks will be around the 10,000-foot elevation level with a modest pace over moderate terrain. Ann is a consulting botanist who has taught plant classes in the Eastern Sierra for many years.

Blizzards and Floods, Dams and Pipelines:
What happens to Mono’s creeks when they reach the desert?
August 19–20
Greg Reis
$130 per person/ $115 for members

Water is both the essence of life and of controversy in the Mono Basin. Mono Basin streams take a fascinating journey full of detours and strange passages. Join Mono Lake Committee Information Specialist Greg Reis for an investigation of the Mono Basin’s link in the water cycle, an intriguing maze of human and natural influences. Discuss climate, snowmelt, DWP and SCE reservoir operations, the creeks, and Mono Lake, as well as the mysteries of where water goes below ground. On the first day visit the watersheds south of the lake, the conveyances, and the recovering creeks. On the second day take a tour of the north Mono Basin, and learn how the recently signed settlement agreement will help restore Mill Creek. This seminar will focus as much on the management of the water as the natural habitats dependent upon it. Greg has over a decade of experience in Mono Basin hydrology and restoration and keeps close track of Mono Basin water.

Fall Bird Migration
August 19–20
Dave Shuford
$130 per person/ $115 for members

The east slope of the Sierra Nevada is a major migration route for birds traveling from northern nesting areas to warm southern habitats. As a result, early autumn is the time of year to see the greatest diversity of landbirds, shorebirds, and waterbirds in the Mono Basin and on Crowley Reservoir. Dave Shuford has been a staff biologist at PRBO Conservation Science for twenty years. He has conducted numerous surveys and research projects in the Mono Basin and beyond and is well acquainted with where to find birds in the Eastern Sierra. This is one of our most popular field seminars so register early!

Visions of the Past:
Bodie, Masonic, and Aurora
August 26–27
Terri Geissinger
$130 per person/ $115 for members

This guided tour is for folks who love history, enjoy the outdoors and don’t mind miles of dirt roads. In the beautiful Bodie Hills, all within 20 miles, lie three ghost towns. Their stories are filled with pioneer families, prospectors, muleskinners, heroes and gunfighters. In 1880, Bodie was known to be the second largest city in California. Now, Bodie is the largest unrestored ghost town in the west with over 170 buildings remaining. As you tour the town and the cemetery, you will hear the fascinating stories of those who lived here and the ones who never left. Nestled in a beautiful canyon, nearly 500 people resided in Upper, Middle, and Lower Town Masonic. Gold was mined with great hope and produced $600,000 in its time. Rock cabins and foundations mark its place in history. Aurora, once a bustling town of 8,000 souls in the 1860s, now rests forever in peace amongst the sagebrush and pinyon pine. A cemetery and few foundations are all that marks this historic place and time. Terri Geissinger is a Bodie State Historic Park Historian, Interpreter, and Guide. She is active in the Mono Basin Historical Society, and has a talent for making history come alive.

www.monolake.org/main/seminars.htm or (760) 647-6595 to register
Living on the Edge: Sierra Nevada Bighorn Sheep in the Mono Basin

September 9–10
John Wehausen
$150 per person/ $130 for members

The US Fish and Wildlife Service listed the Sierra bighorn sheep as Federally Endangered in 1999. This field seminar will involve discussions of the biology and conservation of these animals in the field. The fascinating biology of these animals, and their relationship with other mammals, including mountain lions and humans, will be discussed. Past participants saw Bighorn four out of the last five years, and there is a very good chance of seeing Sierra bighorn sheep in the wild during this seminar, but there’s no guarantee. John Wehausen is a research scientist at White Mountain Research Station in Bishop. He has been investigating various aspects of the Sierra bighorn and working for their conservation since 1974. In the late 1970s he initiated the restoration program that brought bighorn back to the Mono Basin. Some of the proceeds from this seminar will benefit the Sierra Nevada Bighorn Sheep Foundation. Please be aware that this seminar involves strenuous hiking at the 10,000-foot elevation and above.

The Story Behind the Land: Geology of the Mono Basin

September 16–17
Tim Tierney
$130 per person/ $115 for members

The Mono Basin is a geological showcase, featuring young volcanoes, glaciated landscapes, stark mountains, and strange mineral towers, all set about ancient and saline Mono Lake. Explore this land with geologist Tim Tierney (author of the Committee’s field guide Geology of the Mono Basin) and learn how to recognize the geology, know the reasons behind why things have happened, and what the future may hold. The first day of the seminar will be spent gaining an overview of the area via car and short walks. The second day will focus on thoroughly exploring a few select areas with extended hikes. Cooler fall weather and the first tinge of fall color will highlight the geologic wonders of this popular field seminar. Tim is an excellent teacher and interpreter of the “hard” languages, and has been a popular seminar leader among geology sleuths and laypeople alike.

Paiute Cattail Basketry

September 22–24
Lucy Parker and Julia Parker
$185 per person/ $170 for members, $65 materials fee

During this three-day seminar participants will prepare materials and create a small cattail basket. The Tule Basket is a traditional work basket used for gathering pine nuts, berries, and other foods. This seminar is ideal for beginning and intermediate weavers alike. Different techniques of twining will be incorporated in our baskets. You are encouraged (but not required) to camp with the group, and evenings will be spent around the campfire with traditional songs and stories. This seminar is designed for weavers of all levels, beginning through advanced. Lucy Parker is a descendent of the Yosemite Miwok, Mono Lake Kutzadika’, and Kayasha Pomo Peoples. She learned traditional handiwork from her mother, a master basket weaver, and will pass on some of her knowledge in this special three-day/two-night camping seminar. Julia Parker is Lucy’s mother and has dedicated her life to learning and teaching basketry as well as continuing the traditions of her people. She is one of the famous basket weavers of California, and the only weaver still practicing who was taught by women who wove in the early 20th century.

Mono-Bodie Fall Photography

September 22–24
Richard Knepp
$275 per person/ $255 for members

Autumn in the Mono Basin is one of the greatest photographic experiences in the country. Spectacular foliage and skies combine with exceptional light, presenting ample subject matter for photographers in both color and black and white. And, for the third year, the class will spend Saturday in Bodie, inside some of the buildings! Join accomplished photographer Richard Knepp to explore varied shoreline locations at sunrise and sunset, fall color in nearby canyons, and the old ghost town of Bodie. Beyond his photographic expertise, Rick is intimately familiar with the Eastern Sierra and Mono Lake locale. In Bodie, Rick will be joined by Bodie expert, photographer, and good friend Jill Lachman. Jill has taught photo workshops in Bodie for many years. It is quite a special treat to have the opportunity to photograph inside some of the buildings. Subjects for discussion include composition, exposure techniques, filtration, basic theory of the Zone System, and developing a personal vision. Photographers of all levels are welcome; a fully adjustable camera of any size or format is suggested. This photographic seminar is offered for the 12th year in a row, with the new Bodie twist continued for 2006!
Reading the Aspen Groves: Arborglyphs and Aspen Natural History
September 30–October 1
Richard Potashin and Nancy Hadlock
$130 per person/ $115 for members

Known for their breathtaking fall color displays and distinctive quaking, aspens border the high meadows of the Glass Mountains and the Mono Basin. A century of sheep grazing brought many Basque sheepherders into these meadows. With their leisure time they left numerous carvings—or arborglyphs—on the aspens. Join the instructors for an enchanting journey into the aspen groves to explore this historic, organic art form and the natural history of the trees themselves. Learn about the numerous wildlife, insects, and birds that are drawn to the groves. During leisurely walks the instructors will discuss the history of sheep grazing in the Mono Basin, the Basque culture, the cultural significance of the carvings, and efforts to document them. Richard Potashin, aka Alkali Aspenowza, is a long-time Eastern Sierra resident and past Mono Lake Committee intern and canoe guide who has been discovering and documenting aspen carvings for many years. He is currently a Park Ranger at Manzanar National Historic Site. Nancy Hadlock has her BS from the University of Nevada at Reno, her MS from California State University, Sacramento and has worked as an Interpretive Ranger since 1982. She has participated in UNR’s Basque Studies Program and has been a passionate student of Basque culture, history, and stories for over 20 years.

Field Seminar Registration Information

New! Register online at www.monolake.org/main/seminars.htm or call the Mono Lake Committee at (760) 647-6595 and ask for the seminar desk to register. More extensive seminar descriptions are available upon request or online at www.monolake.org.

We accept VISA, MasterCard, and Discover or personal checks payable to the Mono Lake Committee. Sorry, we cannot accept registration by mail or email. Checks must be received within two weeks of registration.

Seminars are limited to 15 people except where noted. If a seminar receives less than six participants (with some exceptions) the seminar will be cancelled two weeks in advance, and full refunds will be issued. If you cancel three weeks prior to the seminar start date, we will refund your payment (less a $10 processing fee). No refunds after that date, but tuition can be applied to another class in 2006.

Participants must sign a liability release form. All seminars operate under permit from the Inyo National Forest.

The Committee works with instructors and field leaders who have received high ratings from past seminar participants. We emphasize a spirit of learning and camaraderie in a magnificent outdoor setting for a reasonable cost.

Proceeds from the Mono Lake Committee Field Seminars benefit research and education in the Mono Basin.

Mono Lake Committee Field Seminars are open to everyone, but Mono Lake Committee members get advance notice and class discounts. If you are not a current member of the Mono Lake Committee, you may receive the discount by joining when you register.
As the summer of 2005 neared its end, Mono Lake Tufa State Reserve Ranger Deana Freeman moved to a position with the National Park Service in Northern California. After months of anticipation the California State Parks Department announced they had selected Jim Pence, a 25-year State Park Service veteran, as the new ranger! In a time of budget cuts in nearly every state and federal agency, the Mono Lake Committee was relieved to see the position filled and excited to meet the newest addition to the Mono Basin.

Pence most recently worked at Marshall Gold Discovery State Historic Park in Coloma, California, but he has worked in locations all over the state. He started as a lifeguard at Huntington Beach during college and has held ranger positions at Tullock Lake, Folsom Lake, and the North Fork of the American River.

Challenging water issues are not unfamiliar to Pence. His past positions have found him involved with historic irrigation reservoirs for the Central Valley, recreational boating areas, and Wild and Scenic Rivers threatened by dams. Pence is a great match for Mono Lake’s rich water history.

Pence has many ideas for the State Reserve, and the ambition to make projects happen. In just a few short months he’s managed to restore a sensitive area damaged by OHV use—just in time to see the once-degraded area bloom with wildflowers. He also hopes to secure grant funding for much-needed work at the Old Marina site on the west shore of the lake.

In his time off you may see Ranger Pence and his wife, Sara, paddling around the tufa in their kayaks—at a safe distance from nesting osprey, of course! The Committee is very happy to welcome them to the Mono Basin, and hope they’ll enjoy this majestic place for many years to come.

Mike Thomas, Ph.D. candidate, and Professor Jack Farmer are located at Arizona State University in the School of Earth and Space Exploration (http://sese.asu.edu) and can be contacted at mdthomas@asu.edu, or jfarmer@asu.edu. Their research is supported by a grant from the NASA Astrobiology Program.
Migration is on! The 2006 Mono Lake Committee seasonal staff are building their nests and settling into Lee Vining.

Before we introduce the seasonal staff, we bid farewell to Membership Coordinator Douglas Dunaway. Many Committee members have gotten to know Douglas over the years through his thoughtful Newsletter articles, talking with him out on the front counter, and on the phone about membership details. The good news is that he’s not going far … Bishop is just down the road. We wish him well in his future pursuits.

Outdoor Experiences Coordinator Molly Hucklebridge comes to us most recently from just over the hill at the Jack L. Boyd Outdoor School in Fish Camp. She has a virtual backpack full of outdoor education experience, as well as experience with the Great Valley Fellows Leadership Program in Modesto. Get ready Molly, the mountains are steeper over here!

Outdoor Experiences Coordinator Megan Stoddard majored in Human Development with an emphasis in Ecopsychology and minored in Outdoor Education at Prescott College in Arizona and also comes to us with lots of experience for education in the outdoors—including spending time at the Great Basin Outdoor School. Welcome back to the Eastern Sierra.

We’re happy to have local Kirsten Watson returning for a second summer season as Retail Assistant. If you’re in town, check in with her at the Bookstore & Information Center — she’s really knowledgeable about the area, and will help you get where you need to go.

Retail Assistant Alayne Meeks joins us from Soquel where she runs Meeks’ Honey. She is a long-time Mono Lake Committee member, and has been a frequent visitor to Mono Lake so we’re happy to have her on board this summer.

Canoe Coordinator JJ Jenkins is on summer break from studying Outdoor Leadership at Warren Wilson College in Asheville, North Carolina. She has experience with white-water canoeing, so she’s definitely prepared for paddling on Mono Lake.

Jessi Barber, Naturalist Intern is an Environmental Studies and Politics major at Oberlin College. She recently completed a NOLS leadership course in Baja, and she enjoys rock climbing, hiking, singing, dancing, and reading.

Ryan Carle, Naturalist Intern, is home from college at UC Santa Cruz where he spent very little time this past year—he traveled instead to India, the Granite Mountains, Santa Cruz Island, and Mendocino County! And yes, he’s home for the summer, making his mom and dad (retired Mono Lake Tufa State Reserve Rangers) very happy, and us too.

Rebecca Hammargren, Naturalist Intern, comes to us from St. Olaf College in Northfield, Minnesota where she recently graduated with a major in Political Science and Environmental Studies. Rebecca has traveled around the world, but this summer is her introduction to Mono Lake—enjoy!

Emi Kiyan, Naturalist Intern, is currently working on her Masters of Environmental Science and Management at the Donald Bren School of Environmental Science and Management at UC Santa Barbara. Emi spent the summer of 2004 teaching English lessons in Taiwan, so she will have no problem interpreting Mono Lake for all the world travelers who visit this summer.

Rachel Neff, Naturalist Intern, is no stranger to Mono Lake, having visited often while growing up. She is getting her second bachelor’s degree in Recreation Administration with a focus on Parks and Natural Resource Management, Interpretation and Environmental Education at Chico State University (her first was in Studio Art from Humboldt University).

Elicia Whittlesey, Naturalist Intern, comes to us straight off the plane from a semester studying in Cameroon. An Environmental Analysis, Society and Development major at Pomona College, Elicia has spent time working at the Sierra Nevada Aquatic Research Laboratory, and is excited to be back in the Eastern Sierra.

Each year we eagerly await the new faces of the seasonal staff, and welcome their energy, enthusiasm, and hard work. We’re excited to have them on the team, and look forward to a great summer! ✈
In memory


Gifts in memory of Committee member Vern Keller of Reno, NV, were sent by Jack B. Bernard, Carol Galantuomini, Lela Terry, the Comstock Insurance Agencies, and L. David Kiley, a friend of 50 years.

In honor

Lois Tandy of Altadena sent a gift in honor of the birthday of Robin Roberts of Santa Cruz.

Matching gifts

Many thanks to all of the members who have given matching gifts from IBM over the years. The Mono Lake Committee is fortunate to receive in-trade IBM products from these donations. Six flat-screen monitors have been purchased—increasing much-needed desk space around the office. Thank you for thinking of us!

Special recognition

Memorial services were held in Bridgeport for local County Supervisor John Cecil, who passed away on April 9th, 2006. John Cecil represented the 4th District of Mono County on the Board of Supervisors for two terms. He was a Mono Lake Committee friend and advocate, and he will be missed by all.

Twenty-eight year Committee member Betty White passed away this spring. During the last five years Betty and her husband Burdette, both Fellows of the Photographic Society of America, could be seen every summer in their motor home exploring and camping around the Mono Basin. Betty was a strong believer in promoting education by founding scholarships for high school and college students that encourage the study of medicine and environmental studies. The Committee will miss her wonderful visits, her true sense of stewardship, and her dedication to Mono Lake.

Outdoors Experiences

The Outdoor Experiences Program needs some help. Do you have any of these items to donate?

- Cast iron frying pans
- Heavy duty cooking pots with lids
- 10–12 cup coffee maker
- Heavy duty outdoor tablecloths
- Motorola Talkabout T5710 walkie talkies
- Warm clothes! Young adult/teen sized jackets, gloves, knit caps, sun hats, mittens, bandanas, and scarves
- Sturdy day packs
- Binoculars
- Large plastic cereal/soup bowls
- Bookshelves
- Books on nature and natural history

If you can donate any of the above—either in new or good used condition, please contact Santiago Escrueria (santiago@monolake.org) at (760) 647-6595. Thank you!

Speaking up on behalf of Mono Lake

On February 15th, 2006 several dedicated Mono Lake Committee members spoke at the Environmental Protection Agency (EPA) hearing on the new set of Clean Air Act regulations that would be detrimental to Mono Lake’s protection. Thank you for speaking for Mono Lake—literally! One member, Anna Mills, sent us her statement, and we thought we’d pass along her inspirational words:

“My name is Anna Mills and I’m here as a member of the Mono Lake Committee. I have visited Mono Lake with my family and with summer camp groups for fifteen years. It is the wildest and most beautiful land I know, and I’m not sure how I could sustain myself through the year without such a place to return to every summer. I always think that I’m looking at a moonscape as I come down through Tioga Pass and see a silver-blue lake in a great grey bowl. Its vastness humbles me. But I know that it is far from barren—it is full of seagulls and fried egg poppies and piñon pines and blazing rabbitbrush and sagebrush that scents the air when it rains. I’ve watched lightning play over the white and black volcanic islands. I’ve spread my arms to the hills around the lake and drawn in the freshest, emptiest air I could imagine. Now I learn that this air could become one of the worst sources of toxicity in America. I hope we can ensure that this basin remains a sanctuary and not a bowl of dust to poison us.” Thank you, Anna.
Bike, run, or volunteer during this action-packed weekend at Mono Lake!

**High Sierra Fall Century**
Saturday, September 9th, 2006

Ride and registration details online at www.fallcentury.org

The Mono Lake Committee sponsors the Mono Craters SAG stop—come on by!

**Tioga Pass Run**
12.4 miles ... only one hill
Sunday, September 10th, 2006

Run and registration details online at www.basecampcafe.com/tioga.htm

Proceeds benefit the Mono Lake Committee

Get ready for the **2006 Free Drawing!**

Tickets will be available in early August—be sure to send them in right away! You don’t want to miss out on this year’s great prizes...

- Camping package from Wilson’s Eastside Sports of Bishop!
- Season passes to Tamarack Cross Country Center and June Mountain!
- Ski equipment package from Footloose Sports of Mammoth Lakes!

plus artwork, vacation packages, and much more!

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